# CLAIMS

WHAT IS CLAIMED IS:

1. A ceiling system for use with a supporting infrastructure, said supporting infrastructure providing for distribution of electrical power and comprising a plurality of frames, said ceiling system comprising:

a plurality of shielding elements supported within said plurality of frames;

a series of lighting elements electrically coupled and energized through said electrical power distribution, said lighting elements adjacent to or otherwise incorporated within said shielding elements; and

said shielding elements being movably mounted to said ceiling structure, and constructed of materials having varying degrees of translucence, so as to adjust intensity and diffusion of lighting projected from said lighting elements.

2. A ceiling system in accordance with claim 1, characterized in that said ceiling system and supporting infrastructure are suspended from a building roof or similar overhead structure through the use of cable elements.

3. A ceiling system in accordance with claim 2, characterized in that said cable elements may be adjusted so as to adjust the height of said ceiling system, relative to the height of said building roof or said similar overhead structure.

4. A ceiling system in accordance with claim 1, characterized in that said materials are constructed and configured so as to permit commercial interior utilities to extend downwardly below a plane substantially formed by said plurality of shielding elements.

5. A ceiling system in accordance with claim 1, characterized in that said materials are constructed and configured so as to have sufficient porosity to permit commercial

interior fire safety utilities to be positioned above a plane substantially formed by said plurality of shielding elements.

6. A ceiling system in accordance with claim 1, characterized in that said series of lighting elements and said plurality of shielding elements are manually removable from said supporting infrastructure.

7. A ceiling system in accordance with claim 1, characterized in that said series of lighting elements comprises a series of LED lighting module strips.

8. A ceiling system in accordance with claim 1, characterized in that said supporting infrastructure comprises parallel and spaced apart rails, and said shielding elements are supported on sides of adjacent rails on pairs of opposing L-shaped brackets.

9. A ceiling system in accordance with claim 8, characterized in that said shielding elements are releasably secured to said L-shaped brackets through securing means.

10. A ceiling system in accordance with claim 1, characterized in that said shielding elements comprise acoustic ceiling shielding elements having materials for providing sound absorption.

11. A ceiling system in accordance with claim 1, characterized in that said shielding elements comprise acoustic ceiling shielding elements having materials for providing sound reflection.

12. A ceiling system in accordance with claim 1, characterized in that said shielding elements comprise air-filled cellular structures.

13. A ceiling system in accordance with claim 1, characterized in that said shielding elements comprise 3D-Pongi fabric.

14. A ceiling system in accordance with claim 1, characterized in that said shielding elements comprise rigid fins.

15. A ceiling system in accordance with claim 1, characterized in that said shielding elements comprise heliofon fabric fins.

16. A ceiling system in accordance with claim 1, characterized in that said shielding elements are supported on opposing lateral sides through the use of said frames of said supporting infrastructure, with said frames constructed of extruded aluminum.

17. A ceiling system in accordance with claim 1, characterized in that said shielding elements are supported from overhead building supports through the use of suspension cables interconnected directly to said shielding elements.

18. A ceiling system in accordance with claim 17, characterized in that said suspension cables are adjustable in length.

19. A ceiling system in accordance with claim 1, characterized in that:

said cross frames are interconnected to other components of said ceiling system through the use of brackets;

a plurality of members are positioned in a spaced apart and parallel configuration along said shielding elements; and

said lighting elements comprise LED lighting modules mounted on undersides of said members.

20. A ceiling system in accordance with claim 19, characterized in that said shielding elements comprise a series of light bags having varying degrees of translucency.

21. A ceiling system in accordance with claim 20, characterized in

that said light bags provide modifications to light intensity and varying degrees of translucency and diffusion with respect to said LED lighting modules.

22. A ceiling system in accordance with claim 20, characterized in that:

each of said members is elongated in length and laterally extends across at least one of said shielding elements;

each of said LED lighting modules is linear in configuration, and mounted to an underside of a corresponding one of said members; and

each of said LED lighting modules includes a series of LED's spaced apart along a length of a corresponding one of said linear LED lighting modules.

23. A ceiling system in accordance with claim 20, characterized in that a plurality of said LED lighting modules are coupled to at least one of said members.

24. A ceiling system in accordance with claim 1, characterized in that said lighting elements comprise linear LED lighting modules flexible in construction and to which low voltage DC power is applied from said distribution of electrical power of said supporting infrastructure.

25. A ceiling system in accordance with claim 24, characterized in that said system further comprises power transformers interconnected to said distribution of electrical power and to said lighting elements for supplying low voltage DC power to said lighting elements.

26. A ceiling system in accordance with claim 25, characterized in

that said system further comprises at least one bus bar for supplying low voltage DC power to said lighting elements.

27. A ceiling system in accordance with claim 1, characterized in that said shielding elements comprise light diffusing fabric fins, and light bags.

28. A ceiling system in accordance with claim 27, characterized in that:

said lighting elements comprise a series of LED members, each having a linear LED lighting module secured to an underside thereof;

each of said linear LED lighting modules comprises a series of spaced apart LED lights; and

suspended from said members are a series of said light bags.

29. A ceiling system in accordance with claim 28, characterized in that said light bags comprise light diffusion heliofon fabric.

30. A ceiling system in accordance with claim 1, characterized in that said shielding elements comprise light diffusing fabric fins.

31. A ceiling system in accordance with claim 29, characterized in that said light diffusing fabric fins are in the form of a singular light sheet.

32. A ceiling system in accordance with claim 31, characterized in that said light sheets comprise light diffusing heliofon fabric.

33. A ceiling system in accordance with claim 1, characterized in that said shielding elements comprise rigid fins having a "deep triangle" configuration.

34. A ceiling system in accordance with claim 33, characterized in that said rigid fins are constructed of a translucent Lexan® material.

35. A ceiling system in accordance with claim 1, characterized in that said shielding elements comprise:

a pair of relatively long rigid fins, essentially forming a rectangular configuration;

a rigid fin of relatively intermediate length, positioned intermediate said pair of relatively long rigid fins;

a rigid fin of relatively shorter length, positioned intermediate said pair of relatively long rigid fins; and

said relatively long rigid fins and said rigid fins of relatively intermediate and shorter length separate a series of linear LED lighting modules from each other.

36. A ceiling system in accordance with claim 35, characterized in that said relatively long rigid fins and said rigid fins of relatively intermediate and shorter lengths are constructed of a translucent Lexan® material.

37. A ceiling system in accordance with claim 1, characterized in that:

said shielding elements comprise a series of rigid fins forming a rectangular configuration around individual ones of linear LED lighting modules; and

said linear LED lighting modules are turned on their sides, so that strips of individual LED's have different directional configurations.

38. A ceiling system in accordance with claim 37, characterized in that said rigid fins are constructed of a translucent Lexan® material.

39. A ceiling system in accordance with claim 1, characterized in that:

said shielding elements comprise a series of parallel and spaced apart linear air tubes; and

said lighting elements comprise linear LED lighting modules spaced intermediate said linear air tubes.

40. A ceiling system in accordance with claim 39, characterized in that said linear air tubes comprise polyethylene air tubes.

41. A ceiling system in accordance with claim 1, characterized in that:

said shielding elements comprise a series of parallel and spaced apart linear air tubes; and

said lighting elements comprise a series of round marker LED lighting modules, positioned adjacent said linear air tubes.

42. A ceiling system in accordance with claim 1, characterized in that:

said shielding elements comprise a series of air pillows; and

said lighting elements comprise a series of round marker LED lighting modules positioned adjacent said air pillows.

43. A ceiling system in accordance with claim 42, characterized in that said air pillows are constructed of a polyethylene material.

44. A ceiling system in accordance with claim 1, characterized in that:

said shielding elements comprise a series of woven fabric materials, suspended from said supporting infrastructure in a manner so as to provide a "wave" pattern; and

said lighting elements comprise a series of LED lighting modules positioned above said woven fabric materials.

45. A ceiling system in accordance with claim 44, characterized in that said system further comprises means for circulating forced air around said fabric materials, and said woven fabric materials are coupled to said supporting infrastructure in a manner so as to

permit generation of "pulsing" curvatures of said woven fabric materials in response to said circulated forced air.

46. A ceiling system in accordance with claim 1, characterized in that said shielding elements may be coupled to said supporting infrastructure through flexible or hinged means, so that said shielding elements may be suspended in varying angular orientations.

47. A ceiling system in accordance with claim 1, characterized in that:

said system further comprises utilitarian elements associated with said shielding elements, with said utilitarian elements comprising at least one controlling device;

said utilitarian elements further comprise at least one controlled device, with said controlled device having at least first and second states; and

said system comprises means for generating communication signals utilized to effect a logical control relationship between said controlling device and said controlled device.

48. A ceiling system in accordance with claim 47, characterized in that said logical control relationship between said controlling device and said controlled device is reconfigured at least in part with said communication signals, in the absence of any physical relocation of any physical wiring associated with said controlling device and said controlled device.

49. A ceiling system in accordance with claim 48, characterized in that said system comprises at least one manually operable programming means for transmitting programming signals so as to effect said logical control relationship.

50. A ceiling system in accordance with claim 1, characterized in that

said ceiling system comprises means for effecting color control of said series of lighting elements.

51. A ceiling system in accordance with claim 47; characterized in that said means for generating communication signals comprises means for effecting color control of said series of lighting elements.

52. A ceiling system in accordance with claim 1, characterized in that:

said system further comprises a set of utilitarian elements associated with said ceilings; and

at least certain of said utilitarian elements are manually releasable from said shielding elements.

53. A ceiling system in accordance with claim 1, characterized in that:

said system further comprises at least one utilitarian element comprising at least one controlling device;

said shielding elements have at least first and second states; and

said system further comprises means for generating communication signals utilized to effect a logical control relationship between said controlling device and said shielding elements.

54. A ceiling system in accordance with claim 49, characterized in that said controlled device comprises at least a subset of said lighting elements.

55. A ceiling system in accordance with claim 1, characterized in that said plurality of said shielding elements comprises at least a subset of said shielding elements constructed at least in part of materials having substantial fire resistant or fire proof properties.

56. A ceiling system in accordance with claim 1, characterized in that said system comprises means for modifying lighting characteristics based upon time of day.

57. A ceiling system in accordance with claim 1, characterized in that said system comprises means for modifying lighting characteristics based on seasonal changes.

58. A ceiling system in accordance with claim 1, characterized in that said system comprises means for modifying lighting in accordance with physical and mental health characteristics for lighting color and intensity.